

FORM PTO-1083  
Mail Stop APPEAL BRIEF – PATENTS  
COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450



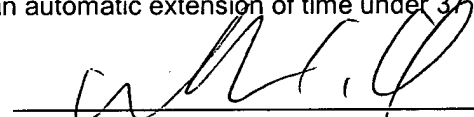
*Zuff*  
Docket No.: 331.1052  
Date: December 17, 2007

In re application of: **Denis REIBEL, et al.**  
Serial No.: 10/730,795  
Filed: December 9, 2003  
For: **METHOD FOR MANUFACTURING A FABRIC FROM AT LEAST PARTIALLY SPLIT YARNS,  
FIBERS OR FILAMENTS**

Sir:

Transmitted herewith is an **Appellant's Reply Brief Under 37 C.F.R. §41.41 (5 pgs)** in the above-identified application.

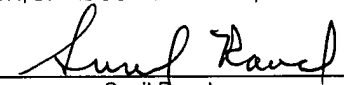
- ☒ Also transmitted herewith are:  
☐ Petition for extension under 37 C.F.R. 1.136  
☒ Other: **Return Receipt Postcard**
- ☐ Check(s) in the amount of \$ .00 is/are attached to cover:  
☐ Filing fee for additional claims under 37 C.F.R. 1.16  
☐ Petition fee for extension under 37 C.F.R. 1.136  
☐ Other:  
☐ Other:
- ☒ The Assistant Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0552.
- ☒ Any filing fee under 37 C.F.R. 1.16 for the presentation of additional claims which are not paid by check submitted herewith.
- ☒ Any patent application processing fees under 37 C.F.R. 1.17.
- ☒ Any petition fees for extension under 37 C.F.R. 1.136 which are not paid by check submitted herewith, and it is hereby requested that this be a petition for an automatic extension of time under 37 CFR 1.136.

  
William C. Gehris, Reg. No. 38/156

DAVIDSON, DAVIDSON & KAPPEL, LLC  
485 Seventh Avenue, 14<sup>th</sup> Floor  
New York, New York 10018  
Tel: (212) 736-1940  
Fax: (212) 736-2427

I hereby certify that the documents referred to as attached therein and/or fee are being deposited with the United States Postal Service as "first class mail" with sufficient postage in an envelope addressed to "Mail Stop: APPEAL BRIEF - PATENTS Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on December 17, 2007.

DAVIDSON, DAVIDSON & KAPPEL, LLC

BY:   
Sunil Raval



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Re: Application of: Denis REIBEL, et al.  
Application No.: 10/730,795  
Filed: December 9, 2003  
Art Unit: 1791  
Examiner: Mark Spisich  
Attorney Docket No.: 331.1052  
Title: **METHOD FOR MANUFACTURING A FABRIC  
FROM AT LEAST PARTIALLY SPLIT YARNS,  
FIBERS OR FILAMENTS**

Mail Stop: APPEAL BRIEF – PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 17, 2007

**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41**

Sir:

Appellants submit this Reply Brief for consideration of the Board of Patent Appeals and Interferences (the "Board") in response to the Examiner's Answer dated October 16, 2007 and in support of their appeal of the Final Rejection dated February 7, 2007. Appellants respectfully reassert each of the arguments asserted in Appellants' Brief dated July 6, 2007, and provides herein only a rebuttal of several of the arguments raised in the Examiner's Answer.

No fee is believed required. If any fee is required at this time, the Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

## ARGUMENTS

In addition to the arguments made in the appeal brief, the following additional remarks are submitted for consideration by the Board under 37 CFR §41.41.

### I. 35 U.S.C. §103(a)

Claims 1 to 13 were rejected under 35 U.S.C. §102(b) as being unpatentable over Talley, Jr. et al. (U.S. Patent 6,767,498 B1) in combination with Kato (U.S. Patent 4,908,176 A).

Independent claim 1 recites: “A method for manufacturing a fabric from yarns, fibers or filaments, including first elementary filaments of a first polymer and second elementary filaments of a second polymer, the method comprising:

receiving the yarns, fibers or filaments, from a common spinneret;

forming the yarns, fibers or filaments into a single first fabric;

compressing the first fabric to a density of at least 10% of a density of the first polymer, the compressing being performed at a temperature between a glass transition temperature and a melting temperature of the first polymer; and

subsequently applying a further mechanical force so as to cause an at least partial splitting of the yarns, fibers or filaments into the first and second elementary filaments.”

The Examiner’s Answer asserts that “the desired density of the fabric of Kato is achieved by compressing the fabric at a temperature between a glass transition temperature and a melting temperature of a first polymer.” See Examiner’s Answer, page 6, lines 9 to 12. Applicants respectfully submit that in Kato, the fiber mat with the emulsion coated or impregnated is heated to a temperature higher than the melting point of the emulsion resin to remove the moisture, whereupon the moldable non-woven fabrics having an apparent density of 0.15 to 0.5 g/cm<sup>3</sup>, preferably 0.17 to 0.3 g/cm<sup>3</sup>, can be obtained. See Kato, col. 4, lines 1 to 6 and claim 1. Therefore the desired density of the fabric of Kato is achieved by heating the emulsion resin beyond its melting point. Furthermore, Table 1 of Kato describes that the density of the fabric of Example 1 before the compressing is .58 and the density of the fibers and the density of the fabric after compressing is not disclosed. Therefore, Kato does not show “compressing the first fabric to a density of at least 10% of a density of the first polymer, the compressing being

performed at a temperature between a glass transition temperature and a melting temperature of the first polymer” as in claim 1 of the present invention.

Also, the Examiner’s Answer asserts that “Talley, Jr. et al teaches a compressing step (col. 14 , lines 58-64 of Talley, Jr. et al) prior to an applying step.” See Examiner’s Answer, page 7, lines 4 to 6. Talley Jr. et al describes that “the fibers of the nonwoven web are generally bonded together to form a coherent unitary non woven fabric. The bonding step can be any known in the art, such as mechanical bonding...” See Talley Jr., col. 14, lines 58 to 62. The compression step of Talley is used to produce the fabric, not as a subsequent step to reduce the density of the fabric once produced. Applicants respectfully submit that Talley Jr. et al does not teach “compressing the first fabric to a density of at least 10% of a density of the first polymer, the compressing being performed at a temperature between a glass transition temperature and a melting temperature of the first polymer” as recited in claim 1 of the present invention. It is also respectfully submitted that it would not have been obvious to one of skill in the art to have provided any compressing step in view of Talley, Jr. or Kato *prior* to the applying step as recited in claim 1 of the present application.

The Examiner’s Answer also asserts that “compressing a fabric to a density of at least 10% of a density of a first polymer would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Talley, Jr. et al in view of Kato principally in order to ensure bonding of the yarns, fibers or filaments used to make the fabric, to manufacture a fabric having sufficient stiffness and elasticity and to optimize the properties desired in the fabric.” See Examiner’s Answer, page 7, lines 16 to 23. The Examiner also asserts that “Kato teaches a step of compressing a fabric to achieve an apparent density of 0.15 to 0.5 gram/ cm<sup>3</sup> .” See Examiner’s Answer, page 7, lines 14 to 15. There is no basis in Kato to support the Examiner’s assertion. Table 1 of Kato describes that the density of the fabric of Examples 1 through 5. Neither the density of the fibers nor the density of the fabric after compressing is disclosed in Kato. Therefore, Kato does not show “compressing the first fabric to a density of at least 10% of a density of the first polymer, the compressing being performed at a temperature between a glass transition temperature and a melting temperature of the first polymer” as in claim 1 of the present invention.

Perhaps most important, the Examiner's Answer fails to identify which asserted components are which. It seems the asserted first polymer is polyethylene terephthalate. See Examiner's Answer, page 6, lines 13 to 19. **There is absolutely no teaching or disclosure that the asserted combination would have been compressed to 10% of the density of polyethylene terephthalate.** In fact, the Examiner's assertion at page 6, lines 1 to 3, that such compression is required "in order to ensure the bonding of the yarns, fibers or filaments used to make the fabric, and to manufacture a fabric having sufficient stiffness and elasticity" is completely unsupported.

Withdrawal of the rejections of claims 1 to 13 under 35 U.S.C. §103(a) is respectfully requested.

**CONCLUSION**

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this Reply Brief is respectfully requested.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: 

William C. Gehris  
(Reg. No. 38,156)

DAVIDSON, DAVIDSON & KAPPEL, LLC  
485 Seventh Avenue, 14<sup>th</sup> Floor  
New York, NY 10018  
Tel: (212) 736-1940  
Fax: (212) 736-2427